

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

Publication
EP 3327372 A4 20190403 (EN)

Application
EP 16828003 A 20160715

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Abstract (en)
[origin: EP3327372A1] The present invention relates to a heat exchanger having a simplified assembly structure as well as a simplified structure for heat-insulating a combustion chamber, the heat exchanger being provided with a heat exchange unit having heating medium flow channels through which a heating medium flows and combustion gas flow channels through which combustion gas combusted in the burner flows to be alternately formed and adjacent to each other in spaces between a plurality of plates, wherein the heat exchange unit comprises: a sensible heat unit which surrounds the outer side of a combustion chamber, is formed of one side area of the plates, and heats the heating medium by using sensible heat of combustion gas generated by the combustion of the burner; and a latent heat unit which is formed of the other side area of the plates, and heats the heating medium by using latent heat of water vapor included in combustion gas that has finished undergoing heat exchange in the sensible heat unit, wherein the rear of the sensible heat unit has provided thereon connection flow channels of the heating medium so that the heating medium that passed through the heating medium flow channels of the latent heat unit can flow to the heating medium flow channels of the sensible heat unit, and the rear of the sensible heat unit also has a water housing cooling unit formed thereon for heat-insulating the combustion chamber.

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Citation (search report)
• [X1] WO 2008107760 A2 20080912 - GAS POINT S R L [IT], et al
• [A] KR 20120045249 A 20120509 - RINNAI KOREA CORP [KR]
• [A] KR 100813807 B1 20080313 - RINNAI KOREA CORP [KR], et al
• [A] JP 2006214628 A 20060817 - NORITZ CORP
• See references of WO 2017014499A1

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EP 3327372 A1 20180530; **EP 3327372 A4 20190403**; CN 107923653 A 20180417; CN 107923653 B 20210129; JP 2018522199 A 20180809; JP 6763941 B2 20200930; KR 101717096 B1 20170327; KR 20170011448 A 20170202; US 10641522 B2 20200505; US 2018216848 A1 20180802; WO 2017014499 A1 20170126

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